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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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EXAMINER

ANDREWS, MICHAEL

ART UNIT

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/584,406	Applicant(s) VASILESCU, CLAUDIU	
	Examiner MICHAEL ANDREWS	Art Unit 2834	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 12 July 2010.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ An election was made by the applicant in response to a restriction requirement set forth during the interview on ____; the restriction requirement and election have been incorporated into this action.
- 4) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 5) ☒ Claim(s) 1,4-7 and 18-22 is/are pending in the application.
- 5a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 6) ☐ Claim(s) ____ is/are allowed.
- 7) ☒ Claim(s) 1,4-7 and 18-22 is/are rejected.
- 8) ☐ Claim(s) ____ is/are objected to.
- 9) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 10) ☐ The specification is objected to by the Examiner.
- 11) ☒ The drawing(s) filed on 12 February 2010 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 12) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-832) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. ____. |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date ____. | 6) <input type="checkbox"/> Other: ____. |

DETAILED ACTION

This Office Action is responsive to the Applicant's communication filed July 12, 2010. In virtue of this communication, claims 1, 4-7, and 18-22 are pending in the application.

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on July 12, 2010 has been entered.

Response to Arguments

2. Applicant's arguments, filed July 12, 2010, with respect to claims 1 and 5 have been considered but are moot in view of the new ground(s) of rejection.

The Applicant's first argument (page 6, line 6 to page 7, line 3 of the Remarks) alleges that Harris does not disclose the axial relief extending obliquely as recited in claim 1 as amended. While Harris does not disclose this feature, this point is moot in view of the new grounds of rejection below.

The Applicant's second argument (page 7, lines 4-18 of the Remarks) alleges that Harris does not disclose the axial relief being shaped so as to serve as a fixing clip for the fan on the corresponding magnet wheel because it attaches to the opposite

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magnet wheel and not the one on which its sealing part is disposed. While this limitation is not recited in the claim, or implied by the functional limitation, this point is moot in view of the new grounds of rejection below.

3. Applicant's arguments, filed July 12, 2010, regarding claim 7 have been fully considered but they are not persuasive.

The Applicant's third argument (page 7, line 19 to page 8, line 14 of the Remarks) alleges that Vasilescu (US 2003/0030334 A1) does not disclose the sealing part, tab, and other features, all of which were disclosed by Harris. In response to applicant's arguments against the references individually, one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986).

Claim Objections

4. The claims are objected to because they include reference characters which are not enclosed within parentheses.

Claim 1, in its last line, and claim 4, in its second and third lines, contain numerals not properly enclosed in parentheses. Reference characters corresponding to elements recited in the detailed description of the drawings and used in conjunction with the recitation of the same element or group of elements in the claims should be enclosed within parentheses so as to avoid confusion with other numbers or characters which may appear in the claims. See MPEP § 608.01(m).

Claim Rejections - 35 USC § 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

6. Claims 1, 4-6, and 18-22 are rejected under 35 U.S.C. 102(a/e) as being anticipated by Buening et al. (US 6,781,262 B2), hereinafter referred to as “Buening”.

With regard to claim 1, Buening discloses a rotor assembly [210] (figures 1 and 4-5) mounted to rotate around an axis of rotation [240] (figures 1-2; the rotor rotates about the shaft [21]) and comprising:

two magnet wheels [16A, 16B] separated by an axial spacing and arranged opposite each other (figure 1; col. 3, lines 1-15), each of the wheels [16A, 16B] comprising an end shield [270] substantially perpendicular to the axis [240] (figures 1-2 and 5; col. 5, lines 7-10) and claws [280] extending axially from the end shield [270] towards the other wheel (figure 5; col. 5, lines 7-18);

the end shield [270] of one of the magnet wheels [16A, 16B] comprising an axial face opposite the other wheel (figures 1 and 5; the inner face of each wheel faces the other wheel);

the claws [280] of one wheel [16A, 16B] being attached to the end shield [270] by respective bases mutually separated by peripheral spaces (figure 4; the bases are the widest, non-tapered portions of the teeth; the spaces are filled by the axial reliefs [300] of the sealing part [340]); and

a fan [380] positioned on the axial face of the end shield [270] of one of the wheels [16A, 16B] opposite the other wheel (figure 4; col. 5, lines 7-18), so as to axially seal at least partly one of the peripheral spaces (figure 4; the flat surface of the fan and the axial-extending portion fill the peripheral spaces);

the fan [380] comprising a plate [340] substantially perpendicular to the axis [240] and attached to the end shield (270), and blades [400] protruding from the plate [340] (figure 4; col. 5, lines 7-18);

the plate [340] having a sealing part (the parts of [340] disposed adjacent to the spaces) axially sealing at least one of the peripheral spaces (figure 4);

the plate [340] of the fan [380] comprising a substantially annular solid part (figure 4);

the sealing part (the parts of [340] disposed adjacent to the spaces) comprising an axial relief [300] in the form of a thin tab (figures 4-5) comprising a first face [310] axially inclined from the solid part of the plate [340] at the side of the claws [280] and from the axis of rotation [240] so that the first face [310] extending obliquely between the solid part and the axis of rotation [240] (figure 4; col. 5, lines 19-39).

With regard to claim 4, Buening discloses the rotor assembly according to claim 1, as stated above, wherein the tab [300] further comprises a second face [320, 330]

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extending from the first face [310] parallel to the axis [240], and wherein the axial relief [300] extends from the plate [340] between the claws [280] (figure 4; col. 5, lines 19-39).

With regard to claim 5, Buening discloses the rotor assembly according to claim 4, as stated above, wherein the axial relief [300] is shaped so as to serve as a fixing clip for the fan [380] on the corresponding magnet wheel [16A, 16B] (figures 4-5; the first face [310] widens in the circumferential direction from its base at the plate to its tip at the second surface [320, 330]; par. 0070 of the application defines the structure implied by this functional limitation as the first surface widening in the circumferential direction).

With regard to claim 6, Buening discloses the rotor assembly according to claim 4, as stated above, wherein the solid part (same as the plate [340]) has a radially outer edge in which is hollowed out at least one recessed zone [350], the sealing part (the parts of [340] disposed adjacent to the spaces) extending from a base of the recessed zone [350] (figures 4-5; col. 5, lines 19-39);

wherein a central web (figure 5; the webs extend behind the axial reliefs [300]) extends axially parallel to the axis of rotation [240] from the base of the of the recessed zone [350] (figure 5); wherein two lateral webs link opposite lateral edges of the central web to the lateral edges of the first [310] and second [320, 330] faces of the tab [300] (figures 4-5), and wherein the central web is narrower than the first and second faces of the tab such that the lateral webs diverge from the central web to the first and second faces (figure 5; the webs are either triangular or trapezoidal, converging toward the axis of rotation).

With regard to claim 18, Buening discloses an alternator or alternator-starter for an automobile vehicle (col. 1, lines 10-23), comprising a rotor assembly according to claim 1, as stated above.

With regard to claim 19, Buening discloses the rotor assembly according to claim 1, as stated above, wherein the first face [310] of the tab [300] extends obliquely from the solid part axially and radially outwardly from the axis of rotation [240] (figure 4).

With regard to claim 20, Buening discloses the rotor assembly according to claim 1, as stated above, wherein the first face [310] of the tab [300] has concave curvature turned towards the axis of rotation (figure 4).

With regard to claim 21, Buening discloses the rotor assembly according to claim 4, as stated above, wherein the claws [280] have radially outer surfaces defining the diameter of the rotor assembly [210] (figures 1-5); and wherein the second face [320, 330] of the tab [300] lies in the extension of the outer faces of two claws [280] and partially seals the space separating these two outer faces over a short axial length (figure 4).

With regard to claim 22, Buening discloses the rotor assembly according to claim 4, as stated above, wherein the tab [300] carries an axial reinforcing rib (figure 5; the ribs extend behind the sealing parts [300]) extending from the plate along the first [310] and second [320/330] faces of the tab (figure 5).

Claim Rejections - 35 USC § 103

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over Buening in view of Vasilescu et al (US 2003/0030334 A1), hereinafter referred to as "Vasilescu".

With regard to claim 7, Buening discloses the rotor assembly according to claim 4, as stated above, wherein the fan [400] is molded (col. 4, lines 33-40), except that Buening does not expressly disclose a fan blade extending along the first face of the tab.

Vasilescu discloses a rotor assembly [42] (see figures 2 and 7) comprising a fan [48] positioned on the axial face of the end shield of one of the wheels opposite the other wheel (see [0052], lines 1-7), wherein the fan has a fan blade extending along the gap between claws [44] of the rotor (see figures 2-5).

One of ordinary skill in the art would have recognized that the fan blades of Vasilescu are known equivalents for the fan blades of Harris. Thus it would have been obvious to one of ordinary skill in the art when the invention was made to substitute one known element, fan blades extending in the axial direction between claws, for another known equivalent element, the fan blades of Harris, leading to the predictable result of the fan blades extending along the first face of the tab.

Inquiry

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael Andrews whose telephone number is (571)270-7554. The examiner can normally be reached on Monday through Thursday between the hours of 8:30 and 4:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Quyen Leung can be reached at (571)272-8188. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Quyen Leung/
Supervisory Patent Examiner, Art Unit 2834

/M. A./
Examiner, Art Unit 2834